

Sex Roles

Undoing Gender in Housework? Participation in Domestic Chores by Italian Fathers and Children of Different Ages --Manuscript Draft--

Manuscript Number:	SERS-D-15-00062R4
Full Title:	Undoing Gender in Housework? Participation in Domestic Chores by Italian Fathers and Children of Different Ages
Article Type:	Original Research
Keywords:	Division of labor, family relations, socialization, social norms, childrearing practices, father child relations
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Funding Information:	
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Abstract

The present article questions whether and to what extent daughters and sons learn how to “do gender” in housework in Italy, a country with low levels of societal gender equality. Using nationally representative time use survey data from Italy (Italian National Institute of Statistics, 2014, waves 2002-2003 and 2008-2009), where daily time use diaries are collected for entire households, logistic models investigate to what extent children (age 6–12), teenagers (age 13–19), and young adults (ages 20–25) participate in domestic chores and whether paternal involvement in housework (controlling for parental education and employment status) is positively associated with children’s participation in domestic chores. The results indicate that daughters are more likely to engage in domestic chores than are sons at all ages and that the gender gap is wider among young adults and teenagers than among children. Moreover, although both sons and daughters are more likely to engage in housework if their father does so, the effect of paternal involvement is much stronger for sons than daughters. These patterns suggest that the learning of housework is a gendered process—a finding that has important implications for the reproduction of gender inequalities in Italy and possibly elsewhere.

Keywords: division of labor, family relations, socialization, social norms, childrearing practices, father child relations

Undoing Gender in Housework?

Participation in Domestic Chores by Italian Fathers and Children of Different Ages

Despite the increased presence of women in the public sphere in most Western countries (see Organisation for Economic Co-operation and Development [OECD], 2014, and Eurostat, 2015, for country-specific data), cross-national comparative studies document that gender inequality in housework has not disappeared (Geist & Cohen, 2011; Treas & Tai, 2016). Some scholars claim that the role modelling that occurs when children observe their parents' gendered division of domestic chores results in their socialization to gender-appropriate behaviour (Goffman, 1977) which could be partly responsible for the persistent unequal division of housework among adults. However, our knowledge about whether sons and daughters imitate their parents' gendered division of domestic chores and then replicate it later in life is limited to a few contexts, in particular the United States (Cunningham, 2001; Penha-Lopes, 2006) and some European countries (see Álvarez & Miles-Touya, 2012, for Spain; Evertsson, 2006, for Sweden).

The present study uses a nationally representative sample of Italian households and logistic regression models to investigate (a) participation in domestic chores by Italian children of different ages and (b) the relationship between participation in domestic chores by Italian fathers and their sons and daughters. Grounded in theories of gender roles (Goffman, 1977) and built on earlier studies published in the present journal on the relationship between participation in domestic chores by parents and by children (e.g., Antill, Goodnow, Russell, & Cotton, 1996, for Australia; Bloch, 1987, and Penha-Lopes, 2006, for the United States), the present analyses make two main contributions to the literature. First, my study provides fresh insights into socialization to gender roles in a country characterized by overall low gender equality and thus should be of interest to researchers studying the mediating role of context in gender-role acquisition. Evertsson (2006) studied the association between

1 engagement in domestic chores by Swedish parents and children, underscoring the
2 importance of analyzing the transmission of gendered patterns of domestic labour in a
3 country that scores highly in terms of gender equality. In contrast, my study contributes to the
4 literature on gender equality by looking at a country in the European Union with one of the
5 lowest levels of societal gender equality: Italy (European Institute for Gender Equality
6 [EIGE], 2010).
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14 Second, whereas most previous research on this topic has ignored the role of
15 children's age in the imitation process by not formally testing whether parental influence
16 varies with the age of children (Antill et al., 1996; Evertsson, 2006), my study jointly
17 analyzes participation in domestic chores by fathers and their sons and daughters of different
18 ages, namely children (ages 6–12), teenagers (ages 13–19), and young adults (ages 20–25),
19 therefore allowing a more fine-grained understanding of the acquisition of gendered
20 behaviour. I focus on paternal participation rather than on participation of both parents
21 because there is very little variation in mothers' behaviour. Indeed, virtually all Italian
22 mothers engage in some housework on a daily basis (Dotti Sani, 2012). Therefore,
23 understanding the transmission of gendered behaviour in such a highly traditional context
24 calls for a closer scrutiny of paternal rather than maternal influence.
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41 **Housework by Children and Parents in Western Countries**

42 Most studies on housework in Western countries concentrate on the allocation of time
43 for domestic chores for women and men (for a recent review, see Lachance-Grzela &
44 Bouchard, 2010) and on the division of these chores between partners (see Fuwa, 2004, for a
45 study on 22 industrialized countries; Dotti Sani, 2014, for evidence from 23 European
46 countries). Only a small body of literature focuses on the time children and teenagers devote
47 to unpaid domestic work. Among these, there is general consensus that (a) girls perform more
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domestic work than boys, (b) older children do more housework than younger ones, and (c) the gender gap widens with age.

In the United States, a gender difference in housework for children and adolescents was found in early studies (Blair, 1992; Bloch, 1987; Gager, Cooney, & Thiede Call, 1999). For example, Gager et al. (1999) focused on teenagers by using data from the Youth Development Study, finding a large gender gap in housework that increases with the teens' age. Gager, Sanchez, and Demaris (2009) found a gender gap and an age gap in housework wherein girls and older teens did more chores than boys and younger teens did; however, they did not test for an age x gender interaction. Similarly, an Australian study found that girls were more likely to engage in feminine tasks than boys were, whereas boys did more masculine tasks than girls did (Antill et al., 1996). Using Australian time-use data and focusing on young adults rather than on children, Craig, Powell, and Brown (2014) reported that young women were more likely than young men to engage in routine tasks. Moreover, both male and female older young adults (ages 25–34) were more likely to do certain routine tasks such as cooking than younger ones (ages 15–19).

Results for two northern European countries are consistent: Evertsson (2006) found that, even in more gender-equal Sweden, girls spend more time on indoor and family-care work than do boys, who are more likely to engage in outdoor tasks; furthermore, both Swedish boys and girls spend more time on chores as they grow older, but the effect is larger for girls. Bonke (2010) showed that Danish boys participate in household chores less than girls do and that older children do so more than younger ones do. Álvarez and Miles-Touya (2012) documented that boys in Spain spent less than half the time that girls spend on female-type housework; moreover, they showed that girls spend more time on female-type housework as they grow older whereas boys do not. For Italy, Belloni and Carrierio (2008) employed nationally representative time-use data to analyze various children's activities,

concluding that girls spend more time on housework than boys do. Furthermore, Romano et al. (2012) showed that girls tended to perform more female-type tasks (such as food preparation) than boys do.

Regarding the relationship between participation by parents and children in housework, results from several Western countries suggest that children are more likely to perform gender-atypical tasks if their parents also do so. In the United States, Cunningham (2001) found that men were more likely to participate in stereotypical female domestic work if their fathers did so when they were children. Similarly, Álvarez and Miles-Touya's (2012) time-use study showed that Spanish boys were more likely to engage in female-type domestic tasks when their fathers also did so. For Sweden, Evertsson (2006, p. 405) concluded that children of both genders "are more prone to engage in gender atypical work the more their parent of the same gender engages in this kind of work."

Low Gender Equality in Italy

Studying whether there is a gender-specific transmission of behaviour is especially important in a country with overall low gender equality. Indeed, Italy's score of 41 on the Gender Equality Index puts Italy close to the European Union countries with the lowest values (Slovakia, Greece, Bulgaria, and Romania) and very far from northern European countries such as Denmark and Sweden (scoring 73 and 74) and from continental countries such as Austria (50) and Germany (51) (EIGE, 2010). Gender inequality in Italy is found in multiple areas. Despite increases over recent decades in female labour force participation (Scherer & Reyneri, 2008) from 35.8% in 1993 to 46.8% in 2014 (Eurostat, 2015), Italian women are still much more likely to be full-time homemakers compared to women from other European countries (Bettio, Plantenga, & Smith, 2013; Eurostat, 2015; OECD, 2014). Research also shows that the responsibility for unpaid domestic work falls disproportionately on the shoulders of women (Carriero, 2009), even among dual-earner couples (Dotti Sani,

2012). Indeed, the family-centered nature of the Italian welfare state largely relies on the ability of Italian families to provide for their own care needs (Saraceno, 1994).

Exploiting the strong family ties that characterize Italian society (Dalla Zuanna, 2001), family responsibilities that in other countries can be offloaded to the state or to the market are generally left to Italian women (Esping-Andersen, 2009), who are also marginalized in the political field (Inter-Parliamentary Union, 2014). For example, in 2011, only 19% of members of local councils were women compared to 27% in Germany, 30% in Portugal, and 43% in Sweden (Sundström, 2013). Last but not least, according to the European Values Study, Italians have more traditional attitudes in terms of gender roles compared to citizens of other European countries. For example, more than 60% of Italian women and men aged 18–65 in 2008 agreed with the statement “What women really want is home and children” as opposed to 49% in Portugal, 41% in Spain, and 32% in Norway (European Values Study [EVS], 2011, own calculation).

Housework by Children and Parents in Italy

Because few studies have focused on housework by Italian parents and children, it is an open question whether gendered patterns of housework participation will emerge in Italy. In a study on Turin, the second largest city in northern Italy, Carriero and Todesco (2011) found that, contrary to their expectations, growing up in a household where parents shared housework equally was not related to children’s division of labour as adults. Romano et al. (2012) employed nationally representative time-use data (2002–2003) to investigate whether there was an association between the amount of time mothers and fathers along with sons and daughters spent on housework. They found that boys were more likely to participate in domestic tasks if their parents shared domestic work to some extent.

Considering the overall low levels of societal gender equality, it is plausible that Italian children receive contrasting inputs in terms of housework gender roles. On the one

hand, role modelling is likely to play an important part in children's acquisition of housework gender equality. Therefore, sons whose fathers engage in housework should be more likely to do such chores than sons whose fathers do not. On the other hand, societal gender inequality might encourage young boys to see housework as women's domain and thus lead these boys to refuse to do domestic chores regardless of examples set by their parents. In other words, sons may be able to ignore their father's participation in housework and adhere to the socially accepted behaviour of men avoiding domestic chores.

Parental Characteristics and Children's Participation

As for the relation between children's participation in housework and other parental characteristics, the results from empirical studies tend to be mixed and highly contingent on the geographical context. Moreover, studies in large part have focused on the role of maternal rather than paternal characteristics. Taking a macro-level approach, Treas and Tai (2012) showed that men were more likely to share female-type tasks in countries with higher levels of historical maternal employment, even when controlling for maternal employment at the individual level. The results from single-country studies, however, are not always consistent. On the one hand, some U.S. studies highlighted a positive association between hours of maternal employment and girls' involvement in housework (Benin & Edwards, 1990; Blair, 1992). On the other hand, Gager and colleagues (1999, 2009) did not find a relation between maternal employment and the amount of chores children do, although Cunningham (2001) uncovered weak evidence that U.S. women perform less stereotypical female housework if their mothers were employed during their childhood. Wight, Price, Bianchi, and Hunt (2009), instead, showed that teenage boys and girls were less likely to do domestic chores if their mothers had high school diplomas.

As for other Western countries, Craig et al. (2014) used Australian time-use data, finding that parental education and employment hours were only marginally related to time

1 spent by their children on housework. Bonke (2010) reported a positive association in
2 Denmark between maternal full-time employment and children doing housework, whereas
3 maternal education reduced the time boys, but not girls, spent on housework. In Sweden,
4 Evertsson (2006) concluded that maternal education somewhat reduced girls', but not boys',
5 housework. In contrast, Cheal (2003) in Canada found no association between parental
6 employment status and children's home responsibilities. For Italy, the results of Romano et
7 al. (2012) indicated that maternal employment marginally increased the amount of time sons
8 spend on typically female domestic work and that maternal education was also important,
9 with children of highly educated mothers more likely to engage in gender-atypical tasks.
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22 Considering the literature on the influence of parental characteristics on the time
23 children spend on domestic chores, I cannot state definitively that some of the parental traits
24 discussed previously may be driving the relationship between participation in housework by
25 fathers and sons. For example, highly educated fathers are usually more gender-egalitarian
26 and therefore more likely to participate in chores than less educated ones (Lachance-Grzela &
27 Bouchard, 2010). Thus, children's participation in housework could be directly driven by
28 fathers' participation but also indirectly by fathers' high level of education. Moreover, highly
29 educated fathers might be more efficient in exhorting their sons' engagement in housework
30 because they place greater value on their children's gender equal behavior than other fathers.
31 In this case, we would also have a direct effect of paternal education on children's
32 housework. To account for these possibilities, I included parental education and employment
33 as control variables in all models.
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51 **The Present Study**

52 As a first step, I ask whether Italian daughters are more likely than Italian sons to
53 engage in housework. Previous studies have shown that Italian women do much more
54 housework than men (Dotti Sani, 2012) and that daughters spend more time than sons on
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domestic work (Belloni & Carriero, 2008; Romano et al., 2012). Therefore I expect daughters to participate in housework to a larger extent than do sons in all three age groups (Hypothesis 1). As children grow older, they likely acquire skills that should allow them to contribute more to household chores. Indeed, previous studies conducted in the United States have shown that older children do more housework than younger ones do (Gager et al., 2009) and that the effect is larger for daughters than for sons (Evertsson, 2006; Gager et al., 1999). Considering that Italian adult women do much more housework than men, I would expect a gender-by-age gap to emerge in adolescence. Therefore, I tested whether young adults and teenagers participate in housework more than children (Hypothesis 2a) and whether the age gap is wider for Italian daughters than for sons (Hypothesis 2b).

Studying whether fathers “undo gender” by participating in domestic chores in such a gender-unequal context is extremely relevant because it can provide better understandings of the reproduction of gender inequalities in a country for which only limited evidence on the topic is so far available (Romano et al., 2012). Studies on other countries have found a positive association between the involvement of fathers and sons but not between fathers and daughters (Cunningham, 2001, for the United States; Álvarez & Miles-Touya, 2012, for Spain). As far as my expectations for Italy are concerned, given the very traditional context, Italian sons may be able to ignore their father’s participation in housework and adhere to the socially accepted behaviour of men who avoid domestic chores. Role modelling, however, should bring sons to imitate the behaviour of their fathers in spite of gender inequality at the societal level. Thus, I hypothesize that fathers who participate in domestic chores will have a positive effect on sons’—but not daughters’—own participation in such chores (Hypothesis 3).

Last, I formally test whether the effect of paternal participation varies among sons of different ages. Considering that older children in the United States have greater autonomy

from their parents and also spend more time in other activities such as paid work (Gager et al., 2009; Manning, 1990), it is plausible that older children will be less sensitive to their fathers' influence. Therefore, I expect the effect of participation by fathers on the participation by sons to be larger among children and teenagers than young adults (Hypothesis 4). All my models control for variables potentially associated with children's domestic chores (Álvarez & Miles-Touya, 2012; Cunningham, 2001), that is, children's employment status, parental employment status and educational level, the number and the gender-ratio of siblings, area of residence, and the year of the survey.

Method

Data and Sample

The data for my analyses were derived from the Italian Time Use Survey (ISTAT 2014, waves 2002-2003 and 2008-2009), a nationally representative survey in which entire households are sampled (approximately 45,000 individuals living in about 20,000 households in each wave), and all household members (including children) fill in their own daily time-use diary. Moreover, personal interviews with all the household members were used to collect socio-demographic information. Data collected directly are generally recognized as more reliable and less subject to recall and gendered reporting biases than data collected indirectly (for a review, see Geist, 2010), especially when it comes to children's time use (see Ben-Arieh & Ofir, 2002).

I focus on children between 6 and 25 years-old ($N = 5406$) living in two-parent households, which are still the vast majority of Italian households (OECD, 2014). Issues of sample selection might arise for the older children because some might have left the household. The very high home-leaving age in Italy (Billari, 2004) to some extent limits the selection, but some caution in interpreting my results is required. Considering that housework

is typically not spread evenly over the week (Craig & Mullan, 2010, covering the United States, Australia, Italy, France, and Denmark), my analyses are limited to weekdays.

Participants

Of the 5406 children studied, there were 1,015 sons and 854 daughters 6–12 years-old, 1,040 sons and 977 daughters 13–19 years-old, and 806 sons and 714 daughters 20–25 years-old. All children were students as were a majority of male (51%) and female (55%) adolescents and a minority of young men (15%) and young women (20%). Whereas 8% of male teens and 5% of female teens were employed, employment was significantly higher for young men (51%) than young women (37%), $\chi^2(2) = 32.07, p < .001$. There was no difference across gender/age groups for father's education; overall, 3,045 (56%) of fathers had low levels of education; 1,822 (34%), medium levels; and 539 (10%) high levels. The same is true for mother's education: overall, 2,912 (54%) of mothers had low levels of education; 2,033 (38%), medium levels; and 461 (8%), high levels. Similarly, there were no gender/age differences for parental employment: overall, 4,733 (88%) fathers were employed; 2,719 (50%) mothers. The mean number of children in a household was similar across groups (overall: $M = 2.06, SD = 0.74$, range = 1–6). Unsurprisingly, the gender-ratio (which was based on sisters) favoured female (overall: $M = 0.80, SD = 0.24$) over male (overall: $M = 0.18, SD = 0.24$) participants across groups, $F = 8812.62, p < .001$. As for regional differences, participants are relatively homogenously spread across the country, with overall 22% living in the North West, 17% in the East West, 16% in the Centre, 33% in the South, and 12% in the Islands, with no relevant differences in the age/gender distribution to be noted. Finally, a majority of respondents (58%) were from the 2002-2003 data collection as opposed to the 2008-2009 survey.

Measures

Participation in housework. A dichotomous dependent variable tapped participation in housework, coded 1 for respondents who reported spending at least 10 minutes on housework on the diary day and 0 for those spending no time. This variable covers all types of housework including cooking, laying the table, washing dishes and cleaning the kitchen, taking out the rubbish, cleaning and tidying the house and outdoor areas, washing and ironing, gardening, taking care of pets, repairing and decorating the house, taking care of the car and other vehicles, shopping and purchasing various types of goods and services, and various management tasks. I chose to recode the variable rather than use it in the original form (i.e., minutes per day) because the distribution was quite skewed due to the large number of children and fathers who reported spending no time on housework. Dichotomizing is an adequate strategy to deal with a highly skewed continuous variables (MacCallum, Zhang, Preacher, & Rucker, 2002). Moreover, among those sons and daughters who did engage in housework, there was very little variation: only 15% of the sample spent more than an hour a day engaged in domestic chores.

In a preliminary analysis, I used a second variable that gauged only washing and cleaning, typically activities regarded as female and known to be among the least enjoyed housework tasks (Poortman & van der Lippe, 2009). The findings were essentially the same as the ones from general housework so these more limited results are not presented here but they are available from the author upon request.

Independent variables. Three independent variables were used to test my hypotheses: (a) a dummy variable indicating whether the respondent is a boy (reference category) or a girl; (b) a categorical variable distinguishing three age groups within which the respondents are likely to experience similar time binds: children (aged 6–12, used as reference category), teenagers (aged 13–19), and young adults (aged 20–25); and (c) a dummy variable indicating whether the father spent at least 10 minutes on housework on the

diary day (0 = no; 1 = yes). I used multiple interactions between these variables to test each hypothesis.

Control variables. To ensure that other parental characteristics were not driving the relationship between the involvement in housework of fathers and children, my models included the mother's and father's education levels: low education = less than secondary education (the reference category), medium education = completed secondary education, and high education = above secondary education. They also included the employment status of both parents, where being employed as the omitted reference category is contrasted with not being employed (which includes full-time homemakers, the unemployed, the retired, and others).

My multivariate models also controlled for a number of potentially confounding variables used in previous studies (Álvarez & Miles-Touya, 2012; Cunningham, 2001). Specifically, these are the employment status of the children (students/inactive as reference category vs. employed, inactive), the number of children in the household, the gender-ratio of the children (i.e. the number of girls over the total number of children), the survey wave (2002-2003 as reference category vs. 2008-2009), and the area of residence (five macro areas: North West as reference category, North East, Centre, South, Islands). Employment status is included because employed children likely have less time to spend on chores than students or inactive sons and daughters (Manning, 1990). The number of children is included in the model to account for the fact that, in larger families, tasks can be shared among household members, ultimately reducing the amount of chores done by each person. Inclusion of the gender-ratio of the children accounts for the fact that having female siblings could reduce participation by other brothers and sisters. Controlling for area of residence is important because Italy is characterized by large gaps (especially between the more

progressive North and the South) in terms of women's presence in the public sphere, attitudes towards gender equality, and division of household labour (Dotti Sani, 2012).

Analysis Plan: Models

The binary dependent variable (0 = the child did no housework on the diary day, 1 = the child did at least 10 minutes of housework on the diary day) is analyzed using logistic regression models, which are a suitable and standard tool to investigate the relationship between a dichotomous dependent variable and a set of independent variables of interest (Long & Freese, 2014). Four models test our hypotheses. The first model tests for Hypotheses 1 and 2a by including gender and age plus the control variables outlined above. It takes the following form:

$$P(y = 1) = \text{logit}^{-1}(\alpha + g\delta + H\theta + ZB),$$

where y indicates the dependent variable, g is a dummy variable indicating the gender of the child and δ is the resulting coefficient, H is a categorical variables indicating the age of the child and θ is the resulting coefficient. Z and B respectively represent the control variables and the corresponding coefficients.

Our second model tests for Hypothesis 2b by including an interaction between gender and age (gH) where Σ is the resulting coefficient.

$$P(y = 1) = \text{logit}^{-1}(\alpha + g\delta + H\theta + gH\Sigma + ZB)$$

Model 3 tests for Hypothesis 3 and includes a dummy variable x indicating whether the father did any housework (β is the corresponding coefficient) which is interacted with gender (gx). γ is the coefficient of the interaction term.

$$P(y = 1) = \text{logit}^{-1}(\alpha + g\delta + H\theta + gH\Sigma + x\beta + gx\gamma + ZB)$$

Finally, Model 4 tests for our last hypothesis by adding a three-way interaction among gender, age and fathers' participation, gHx . In this case the coefficients of the interaction term are represented by the Λ .

$$P(y = 1) = \text{logit}^{-1} (\alpha + g\delta + H\theta + gH\Sigma + x\beta + gxy + gHx\Lambda + ZB)$$

Because the models include interaction terms which are not straightforward in their interpretation, especially when they are expressed in log odds, predicted probabilities are used throughout the text to illustrate the results (Long & Freese, 2014). All probabilities are calculated by setting the variables at the overall sample means.

Because the Italian Time Use Survey samples households, the respondents in the sample may be brothers and sisters living in the same dwelling and sharing family characteristics. To account for this collinearity, robust standard errors were obtained by clustering children belonging to the same household. Moreover, because family variables might be highly correlated (Gager et al., 2009), variance inflation factors (VIF) were estimated to check for multicollinearity, which was not found in any of the models. In fact, the VIF of each coefficient (even the ones for the three-way-interaction coefficients in Model 4) was well below 10, the threshold that indicates possible collinearity. For space limitations, only the mean VIF for each model is reported.

Results

Hypothesis Testing

Hypothesis 1 predicted that female children would be more likely to do some housework than male children. The predicted pattern was found across age groups. Fully 331 (33%) boys and 369 (43%) girls did some general housework, $\chi^2(1) = 22.23, p < .001$; 389 (37%) male and 594 (61%) female adolescents, $\chi^2(1) = 110.35, p < .001$; and 280 (35%) young men and 531 (74%) young women, $\chi^2(1) = 238.92, p < .001$. Moving beyond these descriptive analyses, Table 1 reports the results for the multivariate logistic regressions modelling participation in housework. As can be seen from Model 1 in the first row of Table 1, the coefficient for gender is positive and significant, indicating that daughters are more likely to engage in housework than sons.

Hypothesis 2 explored age and gender differences, hypothesizing that young adults and adolescents would participate more in housework than children do (Hypothesis 2a) and that the age gap would be wider for daughters and for sons (Hypothesis 2b). As reported in Table 1 for Model 1, the coefficients for teenagers and for young adults are positive and significant, suggesting that older children are more likely than younger ones to engage in general housework and thus providing initial support for Hypothesis 2a. However, when the interaction terms between gender and age are included in Model 2, the main terms for age lose some statistical power and magnitude whereas the interactions are positive and significant. These patterns indicate that (a) Italian sons and daughters increase participation in housework with age (supporting Hypothesis 2a) and (b) daughters increase their participation in housework to a larger extent than sons leading to a gender gap that widens with age (supporting Hypothesis 2b).

Moving to paternal participation, Hypothesis 3 predicts that fathers' participation in household chores will affect sons', but not daughters', participation. Fathers were equally likely to participate if their 6–12 year-old children were sons (58%) or daughters (57%) or if their adult children were sons (64%) or daughters (61%). However, fathers were slightly less likely to contribute if their adolescent offspring were daughters (56%) than sons (61%), $\chi^2(1) = 5.53, p = .019$. As can be seen in Table 1, Model 3, the likelihood of children engaging in housework is greater if the father does so. However, the interaction term between paternal participation and daughters in Model 3 is negative, suggesting that when a father is involved in general housework, boys rather than girls are affected by their fathers' behaviour. Thus Hypothesis 3 is supported.

Lastly, Hypothesis 4 postulated that the effect of fathers' involvement on their sons would be stronger among young children and teenagers than among their more autonomous adult children. However, the comparison among these three age groups did not support the

pattern I predicted with Hypothesis 4. As expected, the predicted probability—calculated from Model 4—that a little boy does any housework increases from 0.21 if his father is not involved to 0.34 if his father is involved ($p < .001$). Male teenagers, unexpectedly, are not affected by their fathers' participation ($p > .05$). Also unexpectedly, the probability that an adult son will do any housework is 0.30 if his father did no housework on the diary day and increases to 0.46 if the father did some ($p < .001$). Thus, my prediction that as sons grow older the effect of paternal participation would wear out is not supported. To the contrary, young adults are the most affected by paternal participation in housework (with a difference of 16 percentage points, $p < .001$), closely followed by children (13 percentage points, $p < .001$), whereas teenagers are not receptive to their fathers' example (6 percentage points, $p > .10$).

I have summarized my findings in Figure 1 by plotting the predicted probabilities with 95% confidence intervals for sons and daughters of different ages, conditioned on whether the father did any housework on the diary day and adjusted by setting all other variables in the model to the sample means. The figure provides visual confirmation of the findings outlined above: (a) daughters of all ages are more likely than sons to do housework, (b) the gender gap in housework participation is smallest among children but increases with age as older daughters engage in domestic work much more than older sons, (c) sons more than daughters are affected by paternal participation in housework in all the three age groups, and (d) the positive effect of paternal participation on sons' participation does not decrease with sons' age.

Findings from Control Variables

The results are robust to the inclusion of a variety of parental characteristics, indicating that parental behaviour affects children's behaviour more than parental characteristics do (Cheal, 2003; Gager et al., 2009). The coefficients for the control variables

(not shown for space limitations but available upon request) are in line with previous findings. Adult sons and daughters who are employed are less likely than students and inactive children to engage in domestic work. In contrast, the educational level of the parents is not significantly associated with sons and daughters engaging in housework. However, as time availability theory would suggest, children whose parents are not employed are significantly less likely to engage in housework than children of employed mothers and fathers. No relevant association can be detected as far as household composition is concerned. Finally, children in the Italian South are the least likely to engage in domestic work.

As a robustness check to test whether the control variables had the same effects across gender and age groups, I ran the models separately by age group and within each model interactions with the gender dummy variable were included for all variables. The results (available upon request) reveal that the majority of the control variables generally have the same effects for male and female children, teenagers, and young adults. There are two exceptions to this general pattern. First, in line with theories on gender-deviance neutralization, among young adults the negative effect of employment on participation in housework is much stronger for sons than for daughters. Second, female teenagers and young adults in the South are more likely to engage in domestic chores than their peers in other areas whereas the opposite holds true for sons. This is not an unexpected finding considering that the South of Italy is highly traditional in terms of its gendered division of labour (Dotti Sani, 2012).

Discussion

My article has investigated to what extent Italian sons and daughters of different ages participate in housework and whether paternal participation is positively associated with that of children, teenagers and young adults. My study makes three contributions to the literature.

1 First, it provides empirical evidence of a gender gap in housework that is present not just
2 among Italian adults (Bianchi, Lesnard, Nazio, & Raley, 2014; Dotti Sani, 2012), but also
3
4 among children, teenagers and young adults. Second, it shows that gender differences in
5
6 housework participation become wider as children grow older due to an increase in
7
8 daughters', but not sons, participation. Therefore, it appears that adherence to traditional
9
10 gender roles is rooted in childhood and is then reinforced throughout adolescence up to early
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12 adulthood. Third, the results show that paternal participation in housework has a positive
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14 association with involvement by children and young adults. However, it appears that boys,
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16 regardless of their age, are more positively influenced by their fathers' participation than
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18 girls, indicating the presence of a gender-specific imitation process in Italian families that has
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20 been documented in previous studies in other Western countries (Álvarez & Miles-Touya,
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22 2012; Cunningham, 2001; Penha-Lopes, 2006).
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29 **Limitations and Future Research Directions**

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31 Future research could fruitfully address some shortcomings of the present analysis.
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33 First of all, given the nature of the data, I cannot verify whether the gender-traditional
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35 participation in housework by sons and daughters is driven mostly by children's preferences,
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37 by the frequency of same-gender interactions between parents and children, or by parents
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39 asking their sons and daughters to do different chores. Unfortunately, it is impossible to
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41 ascertain which of these three explanations is more likely. A qualitative study based on in-
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43 depth interviews is likely the appropriate tool to identify the individual-level mechanism
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45 behind the adherence to a gender-traditional participation to housework.
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51 Second, it is not possible to verify whether the behaviour of sons and daughters will
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53 actually be maintained in their transition to adulthood and whether there are long-lasting
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55 effects of paternal housework participation on the involvement of their offspring in
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57 housework as adults. Indeed, one of the limitations of the present data lies in its cross-
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sectional nature. Unfortunately, longitudinal time-use data are not available for Italy. Future research would largely benefit from this type of information because it might expose the processes by which some men learn to be more active in the domestic sphere than other men are.

A third minor limitation, which is quite common to time-use data, lies in having to rely on information for only one day—the interview day—regardless of whether this was a routine or out-of-the-ordinary day. Part of this problem is resolved by analyzing only weekdays. Moreover, housework is a routine activity that needs to be performed daily (Lachance-Grzela & Bouchard, 2010) and the results should therefore be robust to variations in the family Monday-to-Friday routine. Indeed, future research could address whether the patterns observed for weekdays also hold for weekends when the time binds of parents and children are likely to be less restrictive.

Practice Implications

It is necessary to stress the importance of the intergenerational transmission of gender roles for the future development of societal gender inequalities in a country like Italy that overall has very low levels of equality between women and men (EIGE, 2010) such that women are underrepresented in the political field (Sundström, 2013) and are largely out of the labour market (OECD, 2014). More relevant to the present study, Italian women do more housework and provide more care to family members than do women in other Western countries; men do much less (see Bianchi et al., 2014; Craig & Mullan, 2010; and Hook, 2010 for further cross-national evidence). This overrepresentation of women in the private sphere is often interpreted as a response to, but also a precondition for, what has been referred to as the Italian familistic welfare state (Ferrera, 1996; Saraceno, 1994), that is, a welfare state that relies heavily on the availability of family members, mostly mothers and wives, to care for the needs of the household. Thus, despite some changes in recent years, a large

proportion of Italian households still feature a male breadwinner and a female homemaker, at least in certain stages of the life course (Bettio et al., 2013). In this scenario, young women and men are exposed to gendered patterns of behaviour and they are likely to imitate them (Bandura, 1977; Cichy, Lefkowitz, & Fingerman, 2007; Goffman, 1977).

Of course, with the increase in the educational level of Italian boys and girls and the growing presence of women in the Italian labour market (Scherer & Reyneri, 2008), we might expect gender roles to eventually evolve towards greater equality and a sharing of housework (Bolzendahl & Myers, 2004; Cichy et al., 2007). However, the fact that Italian women currently do the lion's share of housework even when they are employed and highly educated (Dotti Sani, 2012) suggests that their children are being exposed in large numbers to a gender-traditional division of unpaid work even when paid work is equally shared between their parents. How this will impact the future housework behaviour of the children is yet to be seen. Even in more gender-egalitarian Sweden—one of the countries where the allocation of domestic tasks between partners is closest to equal (Dotti Sani, 2014), little girls spend more time on chores than little boys do (Evertsson, 2006), suggesting that socialization to gender-appropriate roles in domestic chores is one among the many factors that contribute to adopting more or less traditional gender roles as adults. Moreover, it still remains to be understood whether fathers can be led to do more domestic work, for example through specific policies (Haas & Hwang, 2008, in Sweden; Nepomnyaschy & Waldfogel, 2007, in the United States), with the aim of increasing their effectiveness in transmitting the notion that unpaid domestic work is a “man's thing.”

Conclusion

The fact that little girls, female teenagers, and young women engage in housework more frequently than their male counterparts suggests that time availability and bargaining theories account for only a part of gender inequalities in housework. Indeed, we have no

1 reason to believe that little girls participate in chores more than little boys because they have
2 more free time or less bargaining power; on the contrary, power and time are likely to be
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4 equally distributed between genders when children are young (Lundberg, 2005). Thus, in
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6 large part adherence to gender roles likely accounts for unequal participation by boys and
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8 girls in housework. In other words, Italian children seem to follow traditional gender roles
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10 and seem to “do gender” in housework just like their parents.
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14 This resistant pattern has important implications for the future development of gender
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16 inequalities in housework. If boys and young men learn to do domestic chores in the parental
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18 home because their fathers adopt non-traditional housework behaviours, they might consider
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20 doing housework as gender-appropriate and continue to participate in housework as adults
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22 (Penha-Lopes, 2006). The long-term positive consequence of this persistence would probably
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24 be a more gender-equal division of domestic chores between adult women and men.
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29 However, the fact that young men participate in domestic chores to roughly the same extent
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31 as children signals the near absence of a “learning process” in housework for men. In other
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33 words, as daughters grow older, they become accustomed to the things that need to be done
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35 around the house and they gradually pick up more responsibilities. Older sons, to the
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37 contrary, engage in housework only marginally more than children and teenagers, a fact that
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39 could have some repercussions on their participation in domestic chores as adults. The role of
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41 child socialization in developing future gender equality is probably more complex than it
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43 appears (Deutsch, 2007). However, it might have more effect on the achievement of societal
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45 balance between genders than is usually believed, and therefore it needs to be studied in a
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47 more comprehensive fashion than single-country studies have been able to do so far.
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Table 1

Logistic Regression Models Predicting Participation in All Housework

	Model 1	Model 2	Model 3	Model 4
Daughters (D; sons r.c.)	1.057*** (0.083)	0.562*** (0.114)	0.750*** (0.136)	0.801*** (0.172)
Teenagers (T: children r.c.)	0.511*** (0.082)	0.262* (0.104)	0.251* (0.105)	0.483** (0.168)
Young adults (YA)	1.081*** (0.111)	0.507*** (0.132)	0.497*** (0.133)	0.471* (0.202)
D * T		0.491*** (0.137)	0.501*** (0.137)	0.343 (0.221)
D * YA		1.212*** (0.154)	1.231*** (0.154)	1.258*** (0.251)
Father did housework on day (FWk; did not r.c.)			0.519*** (0.091)	0.647*** (0.152)
FWk * D			-0.315** (0.122)	-0.392 (0.205)
FWk * T				-0.358 (0.201)
FWk * YA				0.041 (0.226)
FWk * D * T				0.232 (0.282)
FWk * D * YA				-0.032 (0.319)
Constant	-0.683*** (0.137)	-0.443** (0.139)	-0.780*** (0.151)	-0.862*** (0.171)
Wald Chi-squared	469	492	513	513
df	18	20	22	26
<i>p</i>	< .001	< .001	< .001	< .001
Mean Variance Inflation Factor	1.83	2.19	2.31	4.28
N	5406			

Note: Unstandardized coefficients and standard errors are in parentheses. The models also control for employment status, the number of children in the household, the gender-ratio of the children, the area of residence, the year of the survey, and the level of education and employment status of the parents. r.c. = reference category.

* $p < .05$. ** $p < .01$. *** $p < .001$.

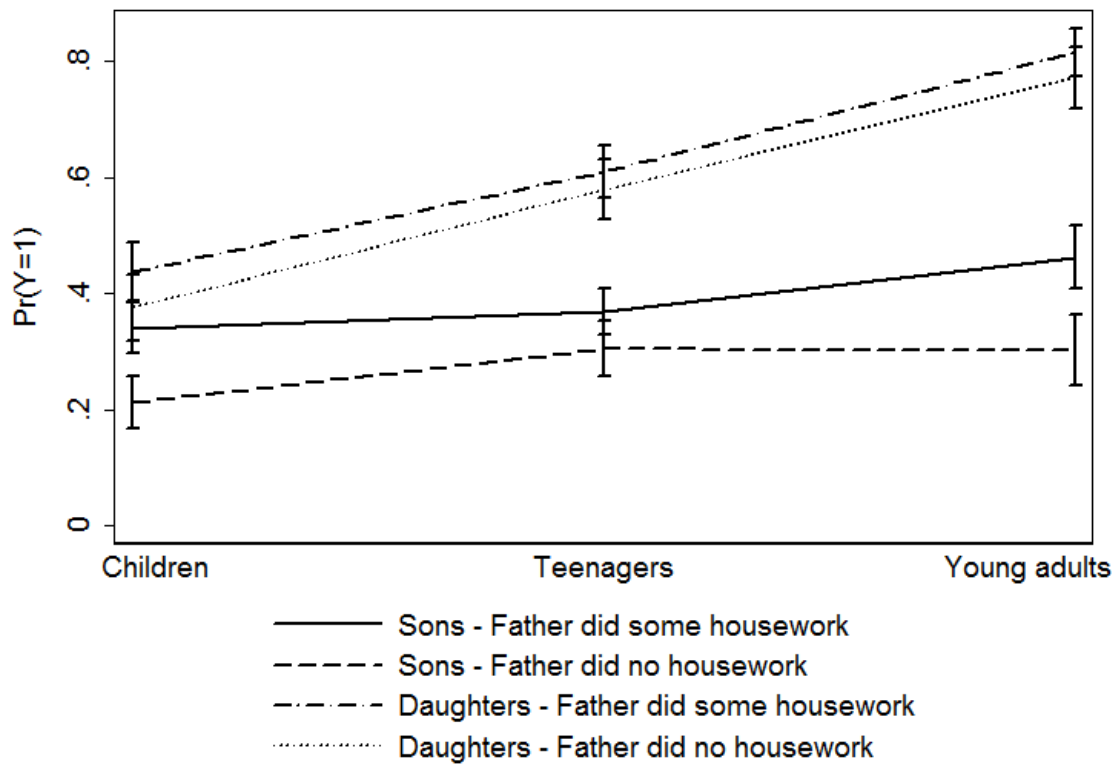


Figure 1. Predicted probabilities with 95% confidence intervals of engaging in housework for children, teenagers, and young adults by gender and by paternal involvement in housework. The predicted probabilities are obtained from Model 4 in Table 2 and are mean-adjusted for employment status, parental education and employment status, number of children in the household, gender ratio, geographical area of residence and year of the survey.

Compliance with ethical standards

Conflict of Interest: The authors declare that they have no conflict of interest

Statement of human rights: This article does not contain any studies with human participants performed by any of the authors.

Informed consent: Informed consent was obtained from all individual participants included in the study.

For the last round of revisions no reply was needed